Ecology and theology

I never knew pod of sperm whales...(SLIDE)

I take it as read that we have an environmental crisis in our world today. I take it as read that at the current rate of carbon emissions we are looking not just at a 1.5 degree rise in global temperatures but a much riskier and unpredictable 2 degrees. I take it as read that we understand 83% of global energy comes from fossil fuels, the biggest cause of human induced climate change and that we are still accelerating the rate at which we pump greenhouse gases into the atmosphere. And I take it as read that while solar energy is hugely promising, wind a little less so, nuclear debatable etc, the arrival of new energy sources has not led to a decline in the use of fossil fuels globally and that we need to keep fossil fuels in the ground if we're going to stand a chance...and that will take the mother of all global deals between differently challenged nations. This is not to mention the loss of biodiversity, acidification of oceans, deforestation and a host of other concerns... but the bottom line is our generation is probably the last or the next to last one that has a real chance to change the trajectory of the environment's destination.

So it's a serious subject – I'm going to start by talking about what our Christian faith has to say about our relationship with creation and then Bp Martin is going to talk about practical responses. Then we'll move into plenary to reflect, discuss and hopefully generate further possibilities.

So, to begin. for many conservatives, particularly religious ones, climate science is "an affront to their deepest and most cherished basic faith: the capacity and indeed the right of 'mankind' to subdue the Earth and all its fruits and to establish a 'mastery' over Nature"

But of course this approach is rooted in a reading of Genesis 1.26 & 1.28 which asserts: (SLIDE)

"Then God said, 'Let us make humankind in our image, according to our likeness; and let them have dominion over the fish of the sea....God blessed them, and God said to them, 'Be fruitful and multiply, and fill the earth and subdue it; and have dominion overt the fish of the sea...."

But this text does not say humanity is to have complete control with the earth to do as it pleases, it often being argued that really what is implied is good stewardship (SLIDE), a CofE report stating that "stewardship implies caring management, not selfish exploitation; it involves a concern for both present and future as well as self, and a recognition that the world we manage has an interest in its own survival and wellbeing independent of its value to us...Good stewardship requires justice, truthfulness, sensitivity and compassion (BSR report, 1991).

However even this account is vulnerable to critique.

It is not just, as James Lovelock and others assert, that stewardship suggests a remarkable degree of hubris, dangerously overestimating our wisdom and ability as the present situation demonstrates;

it is not just that once again we casually omit God's activity from the picture and have human agency as the only agency worth focusing on;

it is not just that stewardship allows a single text, Gen 1 to dictate the terms of our engagement with creation;

it is not just that stewardship sets human beings over creation rather than within it,

but in addition to all this, stewardship lacks specific content. For instance is stewardship about preserving or changing, what is the "good" of creatures and creation we are aspiring to as stewards? And stewardship begs the question which Richard Bauckham has long found the hardest in this area, "why should the rest of creation need us?"

We need to work a bit harder than just to trot out vague notions of stewardship and plumb the scriptures and Christian tradition more deeply if our approach to our creation is to have some sharpness.

So let's look at what a Christians perspective creation might look like.

First, to reclaim Genesis 1; (SLIDE) when Gen 1.28 says humans are to fill the land and subdue it, these two actions are likely closely connected, in which case subduing the land refers to agriculture, the only way humans are able to fill the land – by cultivating it. But this does not imply filling the land at the expense of other creatures – which is why perhaps, God's granting of 'every green plant' to land animals for food (Gen 1.30) is not spoken to animals themselves but to human beings, just after God grants human beings seed-bearing plants for food (1.29)....the point is presumably humans should not grow food to such an extent that this competes with the livelihood of other living creatures. And when Genesis speaks of ruling over other living creatures this does not in itself mean using other creatures as we like. In Gen 1 there's no question of killing animals for food; both humans and animals are vegetarian. And the reason human rule is connected with the expression of the IOG is presumably because this is not about a bald assertion of power, not a matter of use but of care – what links humanity's rule, dominion to the image of God is that this rule is about a delegated participation in God's caring rule over his creatures.

Just in passing, the issue of food is a huge part of our environmental crisis. Food and land related emissions make for 23% of the global carbon footprint – the single biggest factor being deforestation which is largely related to meat production, but some to timber. Foodwise beef and lamb have the largest impact because they ruminate, burping up methane, and you can see why vegetarians and vegans make that choice for environmental and ethical reasons. Am I saying go veggie? No, but the stats all point to the need to reduce to at least half of today's global meat and dairy consumption and the priority is cutting down on cows and sheep. All of this is part of our delegated participation in God's care for the world God loves so much – and it should be clear that this is not our present situation....indeed Gen 1 & 2 portray an ectopia ..the Garden of Eden is not only a Paradise lost but the world as it is called to be ...the full harmonious whole that God pronounced 'very good' still awaits its realisation

Second, our place in creation. (SLIDE) It is noteworthy that while many readers of Gen 1 presume the rest of creation was created for the sake of human beings, there is no support for this in the text. Gen 1 stresses the profusion and diversity of living things, creation is portrayed as an interdependent whole and while human beings are given a special role within that creation we belong integrally TO that interdependent whole; we are OF the earth and not simply living ON it, adam being formed from the dust of the earth, adamah.

Why is this important? Well it might help generate a sense of cosmic humility for one thing, a much needed ecological virtue. As William James put it in 1895, "our science is a drop, our ignorance a sea". The unforeseeable risks we are taking in our Promethean presumption of freedom to do as we please with creation, assuming our ability to come up with technical fixes to any collateral damage rather suggests we understand ourselves not as creatures within creation as much as gods over creation, putting ourselves in God's place. Writings such as the book of Job do the opposite, indeed Job 38-39 could be described as 'the first great piece of modern nature writing', and in those chapters God's cosmic order is underlined, Job's lack of understanding and power noted and Job decentred from his self-preoccupation by God's education of Job concerning the otherness of the cosmos, that this is not merely a human world, a world for me. Furthermore Job 38-39 is not just about a cosmic humility but also a readiness to take delight in the created order – Job 39 illustrating God's sheer joy in his creatures, whether the wild ox or the sand grouse.

This humility is vital in an era when our secular religion is technology and it won't be god that saves us but Bill Gates and a gang of super-geniuses at Intellectual Ventures and elsewhere. We hear versions of this narrative every time an advert comes on about how coal is on the verge of becoming clean, how carbon produced in tar sands will soon be sucked out of the air and buried deep in the ground and how the sun will be turned down as if it were nothing more than a chandelier with a dimmer switch. And if one of the current batch of schemes doesn't work, the same story tells us something else will surely arrive in the nick of time. We are after all, the super-species, the chosen ones, the God Species. We will triumph in the end because triumphing is what we do. It's not true – but we are seduced by this story not least because we can just keep the lifestyle we have and sit tight and wait for someone else somewhere else to solve it. The bottom line is emissions of carbon dioxide have grown exponentially in the last 160 yrs, we have not even dented that carbon curve, it takes a long time to put the brakes on and all of this is grounds for humility not self-congratulation.

But realising our place in creation is also a question of health and wholeness. Wendell Berry provocatively suggests (SLIDE) that to talk of the health of an isolated individual is a contradiction in terms – that the smallest unit of health it makes sense to talk of is the health of a community – in its fullest sense including relationship to others and place, the health of this place and so on. A healthy person is only healthy by reference to this community and health is about reconciliation with creation, an aspiration, an infinite call to heal to be realised in its fullness eschatologically but nonetheless that upon which our health depends.

And this brings me to a third point which is not only self-understanding of our place in creation but also our perspective on the community of creation (SLIDE). Like our God it seems we are to see and engage with this creation as good, as delightful, as wonder-ful, as beautiful. Psalms such as Ps 104 detail and celebrate God's generous extravagance in creation and provision for his creatures, a veritable taxonomy of zoological species, and the praise it elicits. The psalm does not unify this diversity by arguing for human mastery over it all, but by stressing all creaturely dependence on God, the value of all that is created for God and the invitation to share in God's appreciation. Simone Weil the great French mystic of the 20th century suggested that our depravities, vices and crimes are by-and-large attempts to eat beauty, to eat what one can only look at, and that salvation is about the opposite, looking rather than eating. Interestingly in making this observation she alludes to the creation narrative. Weil's words suggest the significance of contemplative practice here, that way of sitting, gazing and attending which looks rather than eats.

This of course requires a huge shift in what we value. (SLIDE) While acquisition and consumption are our gods, compulsively driving economic growth blind to environmental costs, we are on the road to ecological ruin. We need a shift from extrinsic values such as possessions to intrinsic values of contentment, gratitude, relationship. This is a huge challenge – to take for example, downgrading GDP (what Bobby Kennedy described in 1968 as that which measures everything except that which makes life worthwhile")and upgrading well-being measures requires a massive shift and is crucial because what we measure is what gets done. Unthinkingly we reinforce extrinsic values all the time – arguing for example for people to reduce energy consumption simply to save money...it may get a behaviour change but its just reinforced the god of mammon.

But there's a further aspect to the community perspective on creation in the Judeo-Christian tradition which is made in Psalms such as 148, and by saints such as Francis and that is that creation worships and praises God. Not literally but metaphorically, creatures bringing glory to God by simply being themselves and fulfilling their God-given roles in God's creation. And Jesus is clear we need to learn from this – for example to learn from the birds of the air who neither sow nor reap, and from the lilies of the field who neither toil nor spin, but which nevertheless thrive by God's provision. We are in danger of losing sight of this wonder and provision – for instance if you read the story of Lewis and Clark pioneering across Louisiana in 1804 you get a sense of this with their descriptions of grasslands literally black with Bison, and how once they turned a corner of the Missouri river and were amazed to see the surface of the river had turned white, for 3 miles. They realised the whiteness was feathers and a while later discovered 1000s upon thousands of Pelicans moulting on a sandbar. (SLIDE)

How does a Pelican praise God? By being a Pelican. And we, being those who are alive to this praise and conscious of it, arguably have a special role enabling self-awareness and celebration of how a Pelican being a Pelican is worship-ful. Indeed creation's praise of the Creator by being itself raises an interesting question; are human beings priests of creation, that critical link between God and creation. Whether human beings are vocationally to be thought of as priests of creation is a moot point – I would be happy to discuss later if so desired. But in all of this we should understand how creation ministers to us: it is the very otherness of nature in being that which is not within our control that can be such a source of refreshment and renewal for us. Indeed nature can thus be a sacrament of encounter with the greater otherness of God and perhaps, conversely, the common loss of a sense of God in much of modern western society may not be unconnected with the fact that we are mostly so separated from most of nature.

Fourthly, wilderness matters. Scripture is not schizophrenic in it's approach to creation. (SLIDE) It is not that wilderness and untamed nature is bad, chaotic and lawless and tamed creation is good. Indeed wilderness is that place where OUR hopes and plans, our work has no standing – it is not because it is disordered and chaotic that wilderness instructs and humbles us but because it is ordered in ways beyond our understanding – it is not beneath our control but above it. And very often it thus becomes a place of instruction and spiritual transformation. (SLIDE) The gift lies in the tension of the wild and the tame. (Indeed there is a parallel with our body and bodily desires; we can leave our body as an uncultivated wilderness, a chaos of impulsive desires and easy pleasures unmoderated by discipline OR overcultivate, to the point of hatred of the body, strict constraints which are not ascetic but cosmetic, gyms, plastic surgery, botox clinics all refusing the authority of our corporeal limits,

treating our finitude as a flaw that just results in restlessness and constant striving against ourselves). One reason we take a negative view of wilderness is the presumption that the Garden of Eden is somehow God's regulated, ordered formal garden, a heavenly Versailles which human beings have wrecked through disobedience into a jungle. This is not true to the text. There are plenty of fruit trees in Eden, suggesting orchards, but more than that texts such as Ez 31.8-9 allude to the forest of Eden, and if you ask why should a forest be called a garden then it is God's own garden. Wheras the gardens planted by human beings are artificial, the garden planted by God includes wild nature, Ps 104 for example saying God himself planted the cedars of Lebanon, the best known wild forest in the biblical world. (SLIDE) On this account Eden looks as if it is the original, glorious heart of wild nature. Of course Adam tills it and keeps it, undertaking some irrigation etc, but this is not the manicuring of a garden lawn so much as ensuring the fruitfulness of the orchard-forest of Eden. Indeed arguably the healthiest clearing and planting of gardens are done with hedgerows, wooded boundaries and so on, in ways which humbly let wilderness be present – not hubristically clearcutting forests for alien crops to be grown via chemical infusion.

And this description of Eden has a peculiarly contemporary relevance. Replenishing the world's forests (SLIDE) on a grand scale would suck enough carbon dioxide from the atmosphere to cancel out a decade of human emissions, according to recent studies. There is room for an additional 1.2 trillion trees to grow in parks, woods and abandoned land across the planet. Such a goal would outstrip every other method for tackling climate change – from building wind turbines to vegetarian diets. The United Nations initially ran a project known as the Billion Tree Campaign, but in light of Dr Crowther's findings this has been renamed the Trillion Tree Campaign. It has already seen 17 billion trees planted in suitable locations around the world, reclaiming the wild.

More widely this connects with the ectopia envisaged by the Bible, which is sometimes reduced to peace between former enemies, whether the wolf and the lamb or the leopard and the kid. (SLIDE) But it is much richer that this – it depicts peace between the human world (with its domestic animals (lamb, kid, calf, bullock, cow) and those wild animals (wolf, leopard, lion, bear, poisonous snake) that were normally perceived as threats both to human livelihood and to human life. It is noteworthy that when Jesus is in the wilderness he meets three categories of non-human being; Satan, the wild animals and the angels. Presumably he has to establish his relationship as Messiah with all three before embarking on His mission. And wheras Satan is simply an enemy of Jesus and the angels simply his friends. the wild animals, placed by Mark between the two, are enemies of whom Jesus makes friends. Jesus in the wilderness enacts, in anticipatory fashion, the peace between the human world and wild nature which is Isaiah's ectopia (Is 11.6-9). Helen Waddell in her book Beasts and saints (a bit nutty in places) outlines how in one ancient and enduring thread of Christian tradition highlights stories of saints who appear to have mirrored this reconciliation of the wild things with humanity in Christ and while some are no doubt colourful fabrications, (such as St Kevin who while his arms were outstretched in prayer found a blackbird had started to build a nest on his hand, so kept outstretched until the bird's young were born and had flown the nest) there are others with sufficient testimony to suggest there is more here than poetic licence. The great 19th century St Seraphim and the bear is a case in point. (SLIDE)

And of course this reconciliation with the wild relates to protection of biodiversity, preventing the acidification of oceans, of habitats and so on. En passant we might mention plastics here

and not adding to the 9 billion tonnes of plastic so far produced (enough in fact if it was all cling film to wrap the whole planet) (SLIDE) We are called to be those caught up in God's purposes of reconciling the created order in all its diversity, not riding roughshod over it for our own, recklessly short-term benefit.

Incidentally the 5p it costs for plastic bags now has seen as decrease of 95% in demand for such bags. This is good news, BUT globally the amount we chuck out is increasing not decreasing and we have yet to really learn from this and other modest examples that applying costings to environmentally degrading habits will make a huge difference, personally, corporately, and internationally.

Fifthly and finally as Christians our relationship with creation needs to be understood with the end in mind (SLIDE) - indeed shaped by the end in mind, the eternal. Tom Wright points out that popular Christianity has tended to substitute a non-biblical vision of heaven and hell for the revolutionary kingdom of God so that, confusingly we imagine life beyond death as playing harps on fluffy clouds in some soft-focus ethereal realm. That's not the scriptural view which holds that the future is actually a new heavens and earth – this heavens and this earth brought together by God's grace and in which we are called to reign with God. The big show is not a heaven somewhere else but finally the marriage of this earth, this cosmos and heaven, as exemplified by celebrating the descent of the New Jerusalem to earth (Revelation 21 and 22)... a new heavens and a new earth. And you will notice from Mt 6 that as Wendell Berry notes "the first principle of the Kingdom of God is that it includes everything; in it, the fall of the sparrow is a significant event". If we get our eschatology right maybe we'll get our ecotheology right and understand that our vocation as image bearers, is to reflect the praises of creation back to the Creator and to reflect the Creator's wise and loving stewardship into the world, in partnership with our God. This vocation is to be embraced now. (Indeed Berry suggests the KoG could be translated as "the Great Economy", the giftedness of all reality, our ultimate dependence on creation and creation's value in its relationship with God)

And interestingly this sense of vocation in and with God building for the Kingdom which is the new heavens and earth fits with the scriptural picture of human sinfulness doing the opposite, destroying our world. (SLIDE) In the Hebrew Bible there is regularly talk of creation mourning, the land lamenting and it is related to the effect human wrongdoing has had on all its non-human inhabitants, flora and fauna. So Jeremiah asks How long will the land mourn, and the grass of the field wither? For the wickedness of those who live in it the animals and birds are swept away and because people said 'He is blind to our ways' (Jer 12.4). Or again Jer 4.23-24 where the mourning of the earth portrays a kind of reversion to the chaos or nothingness before creation, the un-creation of creation. Human evil has ecological consequences. And when Paul takes up this theme of creation's mourning in Rom 8.18-23, phrases such as creation's "bondage to decay" can be interpreted as a description of the reduction of creation because of human sin. And when Paul speaks of how "the creation was subjected to futility" it might well mean creation was emptied of meaning and purpose by its condemnation to decay. If this is a valid interpretation, then Paul is echoing here the ecological degradation and desertification of the kind the prophets indicated when they spoke of the earth's mourning...and underlines the biblical understanding of the world where the physical, moral and spiritual orders fully interpenetrate one another, in contrast to the modern superstition that these are separable categories. (It is a moral economy not a free market economy that scripture describes; where large accumulations of land were forbidden

because the dispossession and privation of some cannot be an acceptable result of the economic activities of others for that destroys people as a people; where usury was forbidden because the dispossession and privation of some should not be regarded by others as an economic opportunity, for that is contrary to neighbourliness; where greed that accumulate through plundering of creation is not to be countenanced because it destroys God's gift of land.)

Starting with the end in mind – but of course for Christians there is a sense in which the end is the in the middle, the life death and resurrection of Jesus lying at the centre of history and yet it's defining moment. Paul is clear, as are the prophets before him, that the degradation of our world is to be reversed through divine regeneration, a regeneration beginning with the cross and resurrection, with the new creation of Jesus Christ. It is this that gives us the momentum, the chutzpah, the hope to engage relentlessly with the issues we have spoken about. The whole story of creation is wrapped up with the story of Jesus Christ, by whose cross all things are reconciled and through whose resurrection all things are renewed.

Because the crucified and risen Jesus Christ is the creator of all things, the destiny of all things is bound up in his destiny. The healings, the nature miracles, the pacifying of the forces of creation by Jesus all point in different ways to that transformation into a new heavens and earth which Jesus inaugurates, an ecological eschatology. While such an end defies description, Revelation suggests a New Jerusalem fulfilling humanity's desire to build out of nature a human home, a place of human culture and community. Yet the paradise garden, Eden unspoiled, also lives within it...this is a garden city whose character is one of interdependence and reciprocity. Our vocation is to participate in this new creation, to be citizens of the future kingdom here and now, to reflect the praises of creation back to the Creator and to reflect the Creator's wise and loving stewardship into the world, in partnership with our God

OK, enough, just very briefly some implications for this Christian approach;

- 1. Big picture perspective it's the world we are to share in God's care of, which marries up with the need to think globally as the reverberations of what happens some place or felt in other places
- 2. Global empathy a sense of solidarity is at the heart of our understanding of the community of creation and this sense of being in this together is desperately important...and this sense of empathy needs to grow so that for example a diocese struggling to feed its people in Kagera because of carbon emissions is a struggle we are responsible for attending to as a diocese too
- 3. Future thinking there is no planet B and the new heavens and earth are this one we'll all be dead in 60 years but we need to care further than that as Christians who understand where we and creation are headed. Martin Luther is reputed to have said, "If I knew the world would end tomorrow, I would plant a tree." It's very similar to a Jewish saying, "If you have a sapling in your hand and they tell you that the Messiah has arrived, first plant the sapling and then go out to greet him." The end of all things is not a rupture with the present age. It is its fulfillment. That sapling will have time to grow in the eschaton -- indeed, all the time in the world. Deeds of hope begun now will flower in eternity. We are to believe so and act so
- 4. Remain hopeful AND cheerful. Christ IS risen and our vocation is to share in His risen life here and now, the life of the new creation. Sometimes it feels like turning up

at scene of earthquake with dustpan and brush....we can make a bigger difference than we imagine in God's Spirit but need to get smarter at knowing what really makes a difference and appreciating it goes to the core of our value system....BUT we have the opportunity to live BETTER than ever. If we see what is right we are not to wait for the world to see it, but make ourselves right immediately and be an example and embrace our vocation. Also need humility – our desire to save the planet must be reduced to the scale of our competence – that is to begin with my household, my consumption, my neighbourhood.

5. Be practical...which brings me to Martin....